#### Summary of Comments and Responses on the San Bernardino 2nd Draft MS4 Permit (October 22, 2009)

Item No.	Commenting Parties & Page	Section No & Topic	Comment	Response /Change(s) made
No.	Numbers		Comment	nesponse / Onlange(s) made
150	SBCFCD, Board of Supervisors 111709_1	Economic Concerns	the full list of requirements in the Proposed Permit is a daunting challenge to undertake. Implementationis estimated to require, at least, a doubling of staff time and contract costs for each jurisdiction The County, the District and the Cities have proposed a risk-based approach to prioritize water quality problems and apply resources where they will achieve the maximum benefit.	This is the fourth-term permit for the San Bernardino County and incorporated cities. Most elements of the MS4 program have been developed during the previous permit terms and are being implemented by the Permittees. The proposed Order is based on a risk-based approach as proposed by the Permittees in the ROWD.
151	SBCFCD, Board of Supervisors 111709_1	Specific remaining concerns	The proposed Permit could be misinterpreted as imposing numeric effluent limits (NELs) that are potentially applicable to any runoff pursuant to the approved TMDLs (bacteria problems in the MSAR watershed and nutrients in Big Bear Lake). Previous Permits required a BMP-based adaptive management process to protect receiving watersany exceedance of NELs under the proposed Permit would be a potential permit violation, regardless of whether recreational uses are actually harmed. As presented in previous comments, the Regional Board has clear legal discretion to not impose these TMDLs as NELs, and we urge you to ensure that NELs are explicitly deleted from the proposed Permit. We note that the recently adopted "Regional MS4 Permit" for the San Francisco Bay area specifically stated that the TMDLs are not incorporated as NELs.	The December 14, 2009 draft indicates that the final numeric water quality-based effluent limits become enforceable only if the Permittees fail to develop and implement a comprehensive plan to achieve the WLAs by the compliance dates. Once approved by the Regional Board, the comprehensive plans become the final water quality-based effluent limit.
152	SBCFCD, Board of Supervisors 111709_,2	Specific remaining concerns Lack of clear technical solutions	The MS4 Permit requires that the TMDL objectives be achieved as early as 2016. This presents a technical conundrum for us. While we have been actively implementing the TMDL programs, we have not yet identified technical prevention or treatment solutions that would result in the required water quality. We have expressed these concerns during several years of TMDL meetings, yet the proposed Permit would commit us to achieving what has been determined by technical and scientific experts to be impossible with current technology it is unreasonable to impose requirements that we know are infeasible.	Please see revisions in the December 14, 2009 draft to the TMDL sections which provides the Permittees the option to comply with the WLAs through development and implementation of a comprehensive plan. A number of recommendations from the TMDL taskforces have been incorporated into the revised draft (December 14, 2009 draft).
153	SBCFCD, Board of Supervisors 111709_2	Specific remaining concerns New/Redevelopment requirements	The proposed Permit imposes LID implementation on virtually all development projectsSince 2005, the County has been leading a project that just completed a technical manual for Implementation of LIDwhich will evaluate the effectiveness of LID approaches with field monitoring. Yet, the proposed Permit goes beyond using LID, and requires that all runoff from development projects for the water quality design storm be captured, infiltrated, and/or reused. While LID principles are generally accepted, we object to the across-the-board application of "full capture only" LID features, and specific related requirements to change local land use processes. Local jurisdictions bear the liability for their land use decisions and should be granted appropriate discretion to make these determinations.	LID techniques are generally considered as cost-effective and technically feasible. The goal of the requirements specified in the new development and redevelopment section is to mimic the pre-development conditions once development is completed at the site. The draft Order includes a quantifiable measure (design capture volume) for the LID BMPs. The Order provides an option to comply with the design capture volume either through onsite retention or through offsite mitigation or participation in in-lieu programs. The Order does not mandate a specific manner of compliance.
154	SBCFCD, Board of Supervisors 111709_2	Specific remaining concerns Ongoing watershed efforts	The County has been an active participant in ongoing watershed efforts. "the Green County program encourages green technologies and building practices. The District and County have committed significant resources to comply with the TMDL. Since 2002, the District has participatedin several watershed efforts designed to improve water quality, and has provided well over \$1 million in funding. The District works within several Task Forcesincluding Big Bear Lake, MSAR TMDL, and SWQSTF. The district also works with SCCWRP to develop and fund stormwater research projects, including test methods for bacteria. Yet, even though our region has experienced unprecedented growth in the past decade, water quality monitoring results do not indicate that problems are getting worse.	Regional Board recognizes the significant contributions by the County towards improving water quality in the region. However, as evidenced by the 303(d) list of impaired waterbodies, there a number of waterbodies within the region not achieving water quality standards. The goals of the MS4 program is to restore impairment caused by urban runoff and to preserve other water resources from adverse impacts due to urban runoff. We should not be waiting for the water quality to get worse to accomplish these goals.

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155	SBCFCD, through Tim Moore, Risk Sciences 112309_,1	Paragraph 1	In previous correspondence, the Permittees encouraged Regional Board staff to implement the water quality-based effluent limits (WQBELs) through an iterative best management practices (BMP) approach rather than expressing the wasteload allocations (WLAs) as numeric effluent limits (NELs). It appears from the many revisions throughout the draft document that the Regional Board has accepted the Permittee's recommendation.	Please see revisions in the December 14, 2009 draft to the TMDL sections which provides the Permittees an option to comply with the WLAs through development and implementation of a comprehensive plan.
156	SBCFCD, through Tim Moore, Risk Sciences 112309_1	Paragraph 2	Commenting on the draft permit, U.S. EPA acknowledged that the Regional Board could rely on the BMP approach to achieve compliance with the aforementioned WLAs. However, EPA also indicated that, in order to do so, the administrative record for the permit must contain "technical documentation demonstrating that specific BMPs would achieve the WLAs." Risk Sciences has been asked to review the administrative record and supplement it as necessary to meet EPA's requirements.	Comments noted. Based on recommendations from Risk Sciences and others, a number of TMDL provisions have been revised in the December 14, 2009 draft.
157	SBCFCD, through Tim Moore, Risk Sciences 112309_1	Paragraph 3	It appears that EPA is unaware that this issue was carefully considered at the time the TMDLs were adopted. And, in each instance, the Regional Board made specific findings that various BMPs identified in the TMDL implementation plans were expected to achieve compliance with the WLAs. By incorporating the TMDLs, WLAs, and related implementation plans into the draft permits (by reference), the administrative record already contains the scientific evidence needed to demonstrate the probable success of the BMP requirements in the permit. Therefore, the permittees hereby request that the entire administrative record related to the Big Bear Lake Nutrient TMDL (Resolution No. R8-2006-0023) and the Middle Santa Ana River Bacteria TMDL (Resolution No. R8-2005-0001) be added (by reference) to the administrative record for the proposed MS4 permit.	The December 14, 2009 draft includes a requirement for the Permittees to develop a comprehensive plan in accordance with the requirements detailed in the USEPA's comment letter.
158	SBCFCD, through Tim Moore, Risk Sciences 112309_2	Paragraph 4	There are several different Task Forces working on implementation planning for both of the adopted TMDLs in San Bernardino County. Much of the technical documentation relied on to support using the BMP approach was developed by these Task Forces. Therefore, the MS4 permittees hereby request that all of the technical reports, scientific articles, meeting minutes and other documents previously presented to the Regional Board by the Big Bear Lake TMDL Task Force, Storm Water Quality Standards Task Force, and Middle Santa Ana River TMDL Task Force be incorporated (by reference) into the administrative record for the proposed MS4 permit.	A number of recommendations made by the Taskforces have been incorporated into the December 14, 2009 draft of the proposed Order.
159	SBCFCD, through Tim Moore, Risk Sciences 112309_2	Paragraph 5	In addition, new evidence continues to become available to support the Regional Board's decision. For example, on Thursday, November 19, 2009, the Middle Santa Ana River TMDL Task Force reviewed routine water quality monitoring data (attached as Appendix A). These data indicate that bacteria concentrations are declining significantly and the Permittees are actively working to sustain these improvements in order to meet the WLA on schedule. Other documents recently prepared by the Storm Water Quality Standards Task Force (attached as Appendix B) describe the additional BMPs that are expected to close the remaining gap. Finally, a brief bibliography of the scientific and technical papers reviewed by the Task Force is included as Appendix C to this letter.	Comments noted. Based on information provided by the TMDL taskforces, the December 14, 2009 draft includes a number of revisions to the TMDL provisions.
160	SBCFCD, through Tim Moore, Risk Sciences 112309_, 16	Paragraph 6	Collectively, there is substantial evidence to support the Regional Board's conclusion that WLAs could be achieved by implementing one or more of the BMPs identified in the record. The State Board and U.S. EPA also affirmed this conclusion when each subsequently approved the TMDLs. Any claim that the administrative record is deficient with respect to BMP effectiveness is incorrect.	Comments noted. The December 14, 2009 revision addresses the concerns raised by the USEPA and the Permittees.

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	City of Loma Linda_110509_1	Paragraph 1		The ultimate goal of the MS4 program is to control all pollutant sources in urban runoff so as to protect water quality standards in the receiving waters. Preventative measures are the most cost effective approach to controlling pollutant sources in urban runoff. At the planning stages of a project, it is much easier to identify preventative measures. As such, the draft Order includes provisions for the Permittees to consider water quality protection principles during the planning stages. If the City is opposed to incorporating water quality protection principles in its local plans, ordinances and codes, other equally effective control measures will have to be implemented to control the discharge of pollutants from its MS4s. The City will have to show that the control measures that it is proposing to implement will be protective of water quality standards in the receiving waters and is consistent with the maximum extent practicable standard.
162	City of Loma Linda 110509_1	Paragraph 2	The City is also aware of and supports the comment letter being prepared by the Principal Permittee. They will be addressing this and other issues, specifically Numeric Effluent Limits, Road project application and substantial fiscal increases associated with implementation of the Permit. The fiscal challenges presented with this permit are onerous. The cost benefit must be considered as many agencies already have extreme pressure on their budgets.	Comments noted; also see response to the comments related to these issues from the Principal Permittee.
	City of Fontana _111009_1	LID and Green Streets	The draft permit states, "The permittees shall promote green infrastructure/LID BMP implementation." It also requires that all road projects of 5,000 square feet or more	The section on road projects has been revised. See the December 14, 2009 draft.
	City of Montclair_111009_1		incorporate the EPA "Managing Wet Weather with Green Infrastructure: Green Sheets" guidance. LID/Green infrastructure principles include new street design standards, such as	
	City of Hesperia_112309_1 SANBAG 112309 1		narrower streets, limits on parking, use of permeable paving, and more. These principles are untested in San Bernardino County. While EPA does cite examples of LID/Green Street projects, the data is limited to a few cities in the U.S.	
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	City of Fontana_111009_1	LID and Green Streets	We request that the RWQCB delete all reference to LID/Green Streets in the MS4 Permit and instead work with San Bernardino County Flood Control District, SANBAG and the	The section on road projects has been revised. See the December 14, 2009 draft.
	City of Montclair_111009_1 City of Adelanto_111609-		copermittees on a pilot project (s) to test the applicability of these principles to determine water quality benefits. The proposed pilot project would guide the development of widely applicable considerations to address any water quality impacts from roads.	
170	1 City of			
171	Hesperia_112309_1 SANBAG_11/23/09_1			
172	City of Fontana 111009 1 to 2	Zero Discharge/LID	We believe that zero discharge requirements are too restrictive and economically infeasible. A zero-discharge approach is not consistent with the widely accepted principles	Please note that the design capture volume is the 85th percentile 24-hour storm
173	City of Montclair 111009 2		integrable. A zero-discharge approach is not consistent with the widery accepted principles of Low Impact Development, which are central to the draft Permit's development project requirements. We request that flow-through BMPs be added to the menu of BMPs. This is	runoff. The goal of the LID provisions is to mimic pre-development conditions
174	City of Adelanto 111609-		in addition to the BMPs currently proposed in the permit such as infiltration, harvesting and re-use, and evapotranspiration. The proposed zero discharge requirements will require the	considered to be cost effective and economically feasible.
	City of Hesperia_112309_2		preservation of more land and the potential purchase of additional land if offsite mitigation is required. The health of the housing market cannot easily tolerate these requirements	
176	SANBAG_11/23/09_2		and we are very concerned about the impact these measures may have on the economic recovery in San Bernardino.	

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177 178 179 180 181	City of Fontana_111009_2 City of Montclair_111009_2 City of Adelanto_111609-2 City of Hesperia_112309_2 SANBAG_11/23/09_2	Numeric Limits and WQBELs/NELs	We request that all language in the draft permit regarding numeric effluent limits be deleted. We are particularly concerned about the RWQCB citing violations of water quality standards when the numeric limits cannot be achieved. In addition, the Environmental Protection Agency's anti-backsliding rule would not allow the standards to be reduced, creating a no-win situation.	Please see revision to the TMDL provisions in the December 14, 2009 draft of the Order.
182 183	City of Fontana 111009_2 City of Montclair 111009_2	Conclusion	We encourage the Board to support a permit that will incorporate realistic and financially achievable results. We request that the Board direct staff to address the comments outlined in this letter and from the Flood Control District in a collaborative manner with SANBAG, the Flood Control District and the co-permittees prior to the new MS4 permit being considered by the Board. For new concepts related to Low Impact Development, we request the MS4 permit be limited to the creation of pilot projects to test the validity of these principles in our County, instead of mandating them in this challenging economic climate.	Regional Board staff continue to work with the Permittees and other stakeholders. Based on input from various interested parties, including the Permittees, a number of provisions have been revised (see December 14, 2009 draft).
184 185	City of Adelanto 111609- 2 City of Hesperia_112309_2	Conclusion	We request that the Board direct staff to address the comments outlined in this letter and from the Flood Control District in a collaborative manner with SANBAG, the Flood Control District and the co-permittees prior to the new MS4 permit being considered by the Board. For new concepts related to Low Impact Development, we request the MS4 permit be limited to the creation of pilot projects to test the validity of these principles in our County, instead of mandating them in this challenging economic climate.	Regional Board staff continues to work with the Permittees and other stakeholders. Based on input from various interested parties, including the Permittees, a number of provisions have been revised (see December 14, 2009 draft).
186	City of Grand Terrac_11052009_1	Opposed to:	I am strongly opposed to some of the new requirements-including:  •Numeric Effluent Limits (NEL) for TMDL compliance  •Low Impact Development (LID)  •Land use policies and development code  •Public and private road projects  •Residential program  •Requiring changes to Ordinances, General Plans and Municipal Code	Please note that some of the Permit provisions have been revised based input from the stakeholders. Also see response to comments related to each of the listed items in various sections above.
187	City of Grand Terrac_11052009_1	Cost of enforcement	As a small, built-out community with limited land use, any changes to rules and regulations will take a huge toll on development within our City. The limited space available already presents enough problems without adding regulations to it. Grand Terrace supports protecting water quality, however, we are opposed to implementing these requirements as they are written. The cost of enforcement of NEL and changes to City Ordinances, Municipal Codes, General Plan or Zoning/Development Code, as mandated by this Permit, would be in the hundreds of millions if not billions of dollars for County wide infrastructure along with additional staff to maintain and enforce these requirements.	Please note that there are several options to comply with the provisions of the proposed Order. Regional Board staff feels that preventative measures are the most cost effective means to address water quality problems. As such, the draft Order includes requirements to incorporate water quality protection principles in the planning documents, including municipal codes and ordinances.
188	City of Grand Terrac_11052009_1	Unfeasible fiscal challenges	The City also supports the comment letter being prepared by the Principal Permittee. We do not reject the overall goal of improved water quality; however, the fiscal challenges presented with this permit are unfeasible. The cost/benefit must be considered as many agencies already have extreme pressure on their budgets and the available staff is limited.	Comments noted; also see response to comments from the Principal Permittee.

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189	San Bernardino Association Governments (SANBAG)_112309_2	Caltrans Permit	SANBAG projects are typically subject to the Caltrans MS4 Permit. Please clarify in the draft MS4 Permit that the Caltrans Permit will be recognized by the Board and complies with Order No. R8-2009-0036 for State highway drainage facilities that tie into a local agency drainage system within your jurisdiction.	Caltrans projects are regulated under a separate NPDES Permit issued by the State Water Resources Control Board.
190	USEPA, Region 9, through email_112409_1	Consistent approach among the three permits	As I noted at the August 3, 2009 workshop on these two permits, and as we stated in our September 9, 2009 letter regarding the July 10, 2009 draft San Bernardino County permit, and our October 8, 2009 letter on the July 23, 2009 draft Riverside County permit, we'd recommend you use an approach consistent with the Orange County permit adopted by your Board for the incorporation of relevant TMDLs. Our two comment letters provided rationale for why the approaches proposed in the previous draft permits, and the adopted Orange County permit, were appropriate for incorporating TMDLs.	The December 14, 2009 draft of the Permit includes revisions to the TMDL provisions in the Permit. These revisions are consistent with the USEPA guidelines on implementation of TMDLs (November 22, 2002) and USEPA's October 9, 2009 comments on the draft MS4 permits for San Bernardino and Riverside counties.
191	USEPA, Region 9, through email_112409_1	Intent of the revised permit	The apparent intent of the revised permit is to rely on implementation of plans that don't yet exist to determine whether WLAs have been met, rather than the achievement of measured water quality improvements as has been required by RB8's Orange County permit and other recently adopted California MS4 permits. At a minimum, the permits should be revised to provide more detail about the content and implementation of these tobe-prepared plans. As currently drafted, the permits do not provide the necessary expectations for what will be covered in these plans or how necessary updates to the plans will be prepared. Without these detailed expectations, enforcement of the permits will be compromised. The following are our initial suggestions, given the limited time we've had with the new permit language.	The December 14, 2009 draft of the Permit includes revisions to the TMDL provisions, including requirements for developing comprehensive plans designed to achieve compliance with the WLAs by the dates specified in the TMDLs.
192	USEPA, Region 9, through email_112409_1	Suggestion 1 - Detailed Specific BMPs implementation	The revised permit findings describe "a detailed plan and implementation schedule." Page 62 of the same draft permit also includes a brief description of this plan. These descriptions need to be expanded to provide detailed guidelines which clearly lay out the expectations for the content of these plans. At a minimum, the plans must include specific details on the type of BMPs to be implemented, locations where these BMPs will be implemented, who will be responsible for implementing these BMPs, what expected load reductions will be achieved, what monitoring will be conducted to quantify load reductions, along with the submittal of conclusions about BMP performance and the achievement of water quality standards. The plans must include comprehensive schedules, with enforceable deadlines for all of the activities described in the plans.	The December 14, 2009 draft of the Permit includes revisions to the TMDL provisions in the Permit.
193	USEPA, Region 9, through email_112409_1	Suggestion 2 - Specific Timeframes for improved additional BMPs	The permits, in both the Findings and Permit Requirements sections discuss the requirement that permittees propose and implement additional BMPs if the initially proposed measures are not effective in meeting water quality standards. Again, the permits need greater detail on these expectations. There should be specific timeframes provided for the submittal of these updated plans of improved additional BMPs. For example, the permit could require that within 60 days of conclusions that BMPs are not achieving water quality standards at a specific monitoring location, the permittees shall propose improved additional BMPs, including a rationale for why these new measures will be successful at achieving water quality standards.	The December 14, 2009 draft of the Permit includes revisions to the TMDL provisions in the Permit.
193 cont	USEPA, Region 9, through email_112409_1	Suggestion 2 - Specific Timeframes for improved additional BMPs	The permit should include a specific timeframe, for example within 30 days of approval of the amended plan, for when implementation of the amended plan shall begin. The permit should also make it clear that the amended plans must be submitted for EO approval, and thus public review, so as to avoid vulnerability from a EDC/Waterkeepers challenge for not properly providing the public notice of the content of the permit and for not properly specifying the controls as the regulator.	The December 14, 2009 draft of the Permit includes revisions to the TMDL provisions, including timeframes for implementation of the approved comprehensive plans.

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194		Suggestion 3 - Specify expanded expectations in findings and permit requirements	The new reliance on plan implementation, rather than achievement of specific water quality improvements, requires that these expanded expectations be specified in both the findings and permit requirements sections of these two permits.	The December 14, 2009 draft of the Permit includes revisions in the permit provisions and the January 19, 2010 errata provides further clarifications in the findings.
195	0 – –	Suggestion 4 -incorporate both WLAs as numeric limits and achieve WLAs by implementing BMPs	As described in our above-referenced comment letters on these two permits, when a BMP-based approach is used for achievement of WLAs, the details on the specific BMPs to be implemented to achieve the WLAs are to be included in the permit's administrative record. When this has been achieved, the permit may require either the implementation of the required specific BMPs, or achievement of the numeric WLAs. Continuing with this hypothetical situation, should the permittees choose to implement the specified required BMPs they could achieve compliance by taking the necessary actions, including implementation of additional, improved BMPs, should they be necessary.  If the permittees choose not to implement the required BMP approach, they could achieve compliance by meeting the permit's numeric WLAs.	The December 14, 2009 draft of the Permit includes revisions to the TMDL provisions in the Permit. These revisions require the Permittees to develop and implement a comprehensive plan designed to achieve compliance with the WLAs by the dates specified in the TMDLs. In the absence of an approved comprehensive plan, the Permit specifies the WLAs as the final numeric effluent limit.
196	USEPA, Region 9, through email_112409_2		Unfortunately the approach being proposed for these two permits relies on BMP plans that don't yet exist, which are being submitted subsequent to permit issuancewe believe it would be possible for the permit to provide an option of either using a BMP-based approach or a numeric receiving water limit for permit compliance.	The December 14, 2009 draft includes a requirement for the Permittees to develop a comprehensive plan in accordance with the requirements detailed in the USEPA's comment letter.
197	Inland Empire Waterkeeper (IEW)_1123091_1 to 2	Low Impact Development BMPs	Waterkeeper reads the Permit as requiring a site to use LID BMPs to retain or biofiltrate onsite the runoff from a design storm event. As a result, the Permit allows biofiltrated runoff to count toward LID requirements, which is a requirement both less stringent and less protective of water quality than contained in other Permits recently adopted in California, which either do not allow for biofiltration to count towards a site's LID obligations (see NPDES Permit No. CAS004002), or allow for use of biofiltration to meet a site's LID obligations only in cases of demonstrated technical infeasibility of onsite retention. As currently drafted, the Permit would conceivably allow a site to discharge all of its stormwater to the MS4 system through biofiltration, without any requirement that the site retain water onsite, or that the site undertake any offsite mitigation of the volume of water that is biofiltrated.	The South and North Orange County MS4 Permits allow bio-treatment. The proposed draft for Riverside and San Bernardino counties also recognizes biotreatment as a second-tier LID BMP. Bio-treatment should be used only at sites where the first-tier LID BMPs (infiltration, harvest and use, and evapotranspiration) are not feasible.
198	Inland Empire Waterkeeper (IEW)_1123091_ 2	BMPs	As identified by other Permits recently adopted in the state, biofiltration is not as effective a means of reducing pollutant load as onsite retention, nor does biofiltration ensure downstream impacts such as flooding or erosion will be reduced to the same extent. As a result, allowing biofiltration to substitute for use of onsite retention practices such as infiltration, evaporation, or capture, which do not allow for runoff from the 85th percentile storm to leave a site at all, falls short of the MEP standard required by the Clean Water Act.	We agree that infiltration, onsite capture and use and evapotranspiration are the most effective LID BMPs. Bio-treatment is only allowed if those systems are not feasible at a particular site. This priority scheme for LID BMPs is specified in Provision XI.E.3 (December 14, 2009 draft).
199	Inland Empire Waterkeeper (IEW)_1123091_2	Low Impact Development BMPs	Other jurisdictions have developed policies that reflect the strengths of retention and the shortcomings of biofiltration More locally, the Los Angeles Regional Water Quality Control Board recently approved NPDES No. CAS00402, the MS4 permit for Ventura County and its incorporated cities. That permit does not, like the current draft Permit, allow biofiltration BMPs to count toward LID obligations. Rather, the Ventura permit requires that a project employing biofiltration must compensate through mitigation measures. We recommend that you revise your Permit in a similar manner so that a site must both demonstrate technical infeasibility of onsite retention practices prior to use of biofiltration, and must then mitigate offsite any reduction in the removal of pollutants resulting from the use of biofiltration instead of retention-based BMPs.	As discussed above, a bio-treatment system is to be considered only as a second- tier LID BMP. A project proponent will have to conduct a number of analysis to justify the use of such a system at a project site. The proposed Order requires the Pemittees to conduct a feasibility analysis prior to allowing bio-treatment at a site. The Permittees are also required to develop a technically-based feasibility analysis criteria for approval by the Executive Officer. Only a properly engineered and maintained bio-treatment system can be permitted.

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200	Inland Empire Waterkeeper (IEW)_1123091_2	Conclusion - be resolute	The Regional Board should be resolute in ensuring the adoption of this Permit in recognition of the increasing need for clean water. Brief economic disruptions, while regrettable and unenviable, provide an insufficient rationale for regulatory delay. Although the global recession has impacted San Bernardino County to a significant degree the Regional Board must remember that recessions are transitory and cannot be allowed to dictate foundational regulatory mandates such as those under the Act.	The Regional Board is cognizant of its mission to preserve, enhance and restore the quality of California's water resources. While we also recognize the current economic conditions, the proposed Order is consistent with the requirements of the Clean Water   Act and its implementing regulations.
201	Inland Empire Waterkeeper (IEW)_1123091_3	Conclusion - avoid extensions	The Regional Board should avoid granting extensions because all parties possessed advanced notice of the expiration of the existing MS4 permit and San Bernardino County and Riverside County staff were in attendance at regional MS4 permit meetings over the past year. This actual knowledge by county staff of the criteria considered by the Regional Board and stakeholders concerning the issuance of new MS4 permits provided staff with adequate time to prepare for the deliberations concerning the San Bernardino MS4 permit. The granting of an extension would unreasonably delay attaining increased water quality objectives and recharging depleted groundwater through the wider implementation of LID principles.	Comment noted. The Permit does not provide any unreasonable extensions for various reports and plans required under the Permit. Any extensions that are provided are based on consideration of the time needed to enact new municipal ordinances and consideration of the municipal budget processes.
202	Orange County Water District (OCWD_via email_112009_1	Section II.E.11 page 14 of 119	This section references (OCWD, 2009) but there is no footnote for this reference	This paragraph has been edited and references have been provided. See the December 14, 2009 draft.
203	Orange County Water District (OCWD_via email_112009_1	Section II.E.11 page 14 of 119	This section discusses wetlands behind Prado Dam. In general terms, there are two areas in Prado Basin that are sometimes referred to as 'wetlands'. The entire Prado Basin, covering approximately 10,000 acres, is sometimes referred to as a 'wetland'. Also, the wetlands constructed and operated by OCWD are also referred to as a 'wetland'. Please clarify whether the wetlands specifically being referred to on page 14 are the approximately 450-acre wetland system constructed and operated by OCWD or the entire Prado Basin. If the wetlands referred to on this page include both the entire Prado Basin and the OCWD constructed wetland, the water quality changes that are associated with each should be described separately. The discussion of water quality changes associated with the OCWD constructed wetland and the entire Prado Basin should not be lumped together, since this tends to confuse the reader.	See revisions in the December 14, 2009 draft. The reference to wetlands here is the entire Prado Basin, including the OCWD's constructed wetlands. The intent here was not to elaborate on the pollutant removal efficiencies of the wetland systems, but to indicate that Prado Dam and the associated wetland areas remove some pollutants.
204	Orange County Water District (OCWD_via email_112009_1	Section II.E.11 page 14 of 119	The statement that the wetland helps minimize pollutant transport to the lower watershed needs to be discussed in greater detail. The OCWD constructed wetland in Prado Basin is operated to reduce nitrate concentrations in Santa Ana River water. Operation of the wetland has been successful in reducing nitrate concentrations. Other constituents besides nitrate may or may not be reduced in concentration by the wetland. If the "pollutant transport" that is referred to in this section deals with constituents other than nitrate, these constituents should be described and the evidence for their removal in Prado Basin should be provided. For example, the water quality data or studies that document their removal should be cited.	Comment noted. See revised language in the December 14, 2009 draft. The discussion here was not intended to quantify any pollutant reductions.
205	Orange County Water District (OCWD_via email_112009_1	Section II.E.11 page 14 of 119	In addition, the majority of the annual flows of the Santa Ana River are not diverted through the OCWD wetland. During base flow conditions, approximately half of the Santa Ana River flows are diverted through the wetland. When there are significant storm flows in the river, the diversion structure is washed away which results in most of the storm flows bypassing the wetland. Therefore, generally speaking, the wetland does not treat stormwater flows.	Comment noted. See revised language in the December 14, 2009 draft.

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206	Orange County Water District (OCWD_via email_112009_1	Section II.E.11 page 14 of 119	Regarding the statement that the Prado Dam serves to prevent trash and debris from being transported downstream, a significant amount of trash and debris passes through the dam and is transported downstream.	Comment noted. See revised language in the December 14, 2009 draft.
207	CICWQ_112009_2	Section XI. D.2 WQMP Requirements	We note that the principal permittee is given 12 months from the date of adoption to revise its WQMP Guidance and Template. The Draft Riverside County MS4 Permit provides 18 months to perform this task. We recommend allowing 18 months to complete the necessary WQMP updates.	See revisions in the December 14, 2009 draft.
208	CICWQ_112009_2	Section XI. E.1 LID and Hydromodification Management	Same comment as above. San Bernardino County is given 12 months to incorporate LID provisions, while Riverside County is given 18 months. We recommend 18 months to complete the necessary document updates to incorporate LID principles.	See revisions in the December 14, 2009 draft.
209	CICWQ_112009_2	Section XI.E.4 and Footnote 91	We suggest deleting the first sentence of Footnote 91 which states: "Only volume biotreated and retained onsite qualify towards the volume capture standard." This statement did not appear in the Draft Permit released on July 10, 2009 and is inconsistent with the same provision found in the Draft Riverside County MS4 Permit (page 91 of 122, Footnote 53). Moreover, it is inappropriate because both bioretention volume based best management practices (BMPs) and biofiltration flow through BMPs are acceptable biotreatment alternatives for meeting the LID water quality volume capture standardthe use of biotreatment BMPs must be allowed to meet the volume capture standard without performing a detailed infeasibility analysis of infiltration, harvest and use, or evapotranspiration as is currently required.	We agree with CICWQ that infiltration, harvesting and reuse and evapotranspiration are more effective LID BMPs to remove pollutants and to address hydrologic conditions of concern compared to bio-treatment. We believe that bio-treatment should be part of the LID toolbox but for bio-treatment, as a second-tier LID BMP.  Permit language has been modified and a flow chart has been prepared to show the LID process. If necessary, this LID flow chart will be presented at the January 29, 2010 public hearing.
210	CICWQ_112009_2	, ,	We have demonstrated in the written record and through expert testimony to the Board that these systems under many circumstances provide equal or better pollutant removal than zero discharge type BMPs only. There is no evidence to suggest that the exclusion of properly engineered treat and release LID BMPs in the LID standard will lead to better water quality on a long-term pollutant removal basis.	See response above.
211	CICWQ_112009_3	Section XI.E.5.d.ii.c	We suggest modifying section XI.E.5.d.ii.c. to read "all downstream conveyance channels that will receive runoff from the project are engineered and regularly maintained to ensure design flow capacity, and no sensitive stream habitat areas will be affected." In addition, we suggest striking the second sentence in this clause. The date of compliance with agency approvals provided in the Draft Permit is arbitrary and nexus to the listed agencies is unclear relative to hydromodification control.	See revisions in the December 14, 2009 draft permit.
212	CICWQ_112009_3	Section XI.E.7	This section refers to a feasibility analysis for LID that "includes technically based feasibility criteria for project evaluation to determine feasibility of implementing LID". We reiterate our previous comments and testimony that economic feasibility must also be considered when determining the implementation feasibility of LID BMPs. This is especially important when the feasibility of implementing onsite harvest and use systems is considered relative to the availability of a recycled water supply. Footnote 91 also addresses the feasibility analysis process and suggests that feasibility determinations will only be technical in nature and not consider economics. We strongly suggest that economic considerations be expressly included in the LID BMP feasibility analysis process.	Please note that this section does include economic consideration; it states, "or if the cost of BMP implementation greatly outweighs the Pollution control benefits".

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Item No.	Commenting Parties & Page Numbers	Section No & Topic	Comment	Response /Change(s) made
213	CICWQ_112009_4	Attachment 4. Glossary	The current definition of Low Impact Development (LID) given within Attachment 4 on page 109 of 119 is unacceptable and narrowly defines LID to only those practices that infiltrate, harvest and use, or evapotranspire water onsite. The LID definition in the Glossary for the July 10, 2009 Draft Permit should be restored and used, as it accurately reflected the principles of LID and the range of possible practices supporting application of those principles.	The definition for LID has been modified.
214	CICWQ_112009_4	Section References	the last sentence of Section E.4. should refer to Section XI.E.10 and Section XI.G, rather than the current reference to Section XI.E.8 and XI.F. Also note that Footnote 92 should refer to Footnote 91, not Footnote 85 as is currently written.	The section numbers and the references have been corrected.
215	CICWQ_112009_4	Section References	In Section XI.E.5.d, Hydrologic Conditions of Concern (HCOC), part "vii" should be revised to part "ii."	The section numbers and the references have been corrected.
216	CICWQ_112009_4	Section References	In Section XI.E.10, the reference to "under Section F" should be changed to read "under Section G."	The section numbers and the references have been corrected.
217	CONTECH_112309_1	Section XI.E.3, P 80	Replace the third mitigative BMP option with a requirement that "any portion of the water quality event that can not be retained on site must be treated by BMPs demonstrated in the field to be highly effective for primary pollutants of concern, and at least moderately effective for secondary pollutants of concern expected to be generated on site."  Justification:  The third "mitigative" BMP option given is "Vegetated BMPs that promote evapotranspiration, including bioretention, biofiltration and bio-treatment". These are all descriptive BMP terms that have no specific performance based connotations. This is not adequately protective of water quality and unnecessarily limits the treatment options available to stormwater treatment system designers.	See revisions in the December 14, 2009 draft.
218	CONTECH_112309_1	Section XI.E.4, P 80	Replace the word "biotreat" with "treat with BMPs demonstrated in the field to be highly effective for primary pollutants of concern, and at least moderately effective for secondary pollutants of concern expected to be generated on site."  Justification: Currently there is no performance standard set for "biotreatment" BMPs in this permit. Instead, "biotreatment" BMPs must simply be properly engineered and maintained. The current draft leaves open the possibility that properly designed and maintained vegetated controls such as filter strips and swales will be considered adequate treatment even where pollutants of concern include nutrients, trash, bacteria or other pollutants that are not adequately addressed by these technologies This permit section as written simply requires that the BMPs have some vegetated or biological component and requires no specific level of performance.	Please note that bio-treatment is accepted as a second-tier LID BMP. However, only a properly designed and maintained bio-treatment system would meet the permit requirements.
219	CONTECH_112309_2 to 3	Section XI.E.5.c.ii, p81	Change to "based on their effectiveness in pollutant removal and runoff reduction and require project proponents  Justification: The pollutant load reduction attributable to a treatment control depends both on its ability to reduce pollutant concentrations and its ability to reduce runoff volumes	See the December 14, 2009 draft.
220	CONTECH_112309_3	General Change Suggestion	Replace "reuse" with "use" throughout the permit where it is used to refer to water harvest.  The word "reuse" is borrowed from wastewater reuse discussions and is not appropriate for stormwater harvest applications. Harvested stormwater has no prior use	Permit language has been modified; see the December 14, 2009 draft.

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